

2011 Military Health System Conference

Leveraging Informatics For Healthcare Innovation

The Quadruple Aim: Working Together, Achieving Success

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25 Jan 2011



Office of the Air Force Surgeon
General

Air Force Mission - “Aim High”



- **Global Vigilance**
Persistent, Actionable
- **Global Reach**
Anywhere, Anytime
- **Global Power**
Rapid, Decisive



Fly, Fight, and Win...in Air, Space, & Cyberspace

AFMS Mission



A Heritage of Innovation - A Passion For Excellence



AFMS VISION:

**WORLD CLASS HEALTHCARE FOR
OUR**

BENEFICIARIES ANYWHERE,

ANYTIME

Generation Of Knowledge

**An Entity In Continuing Pursuit Of
Perfection Through Elimination of
Waste And The Generation Of**

Leesburg “Aligned For Success”

Single Mission - Delivered Within An Integrated

We Sought Disruptive Innovation...

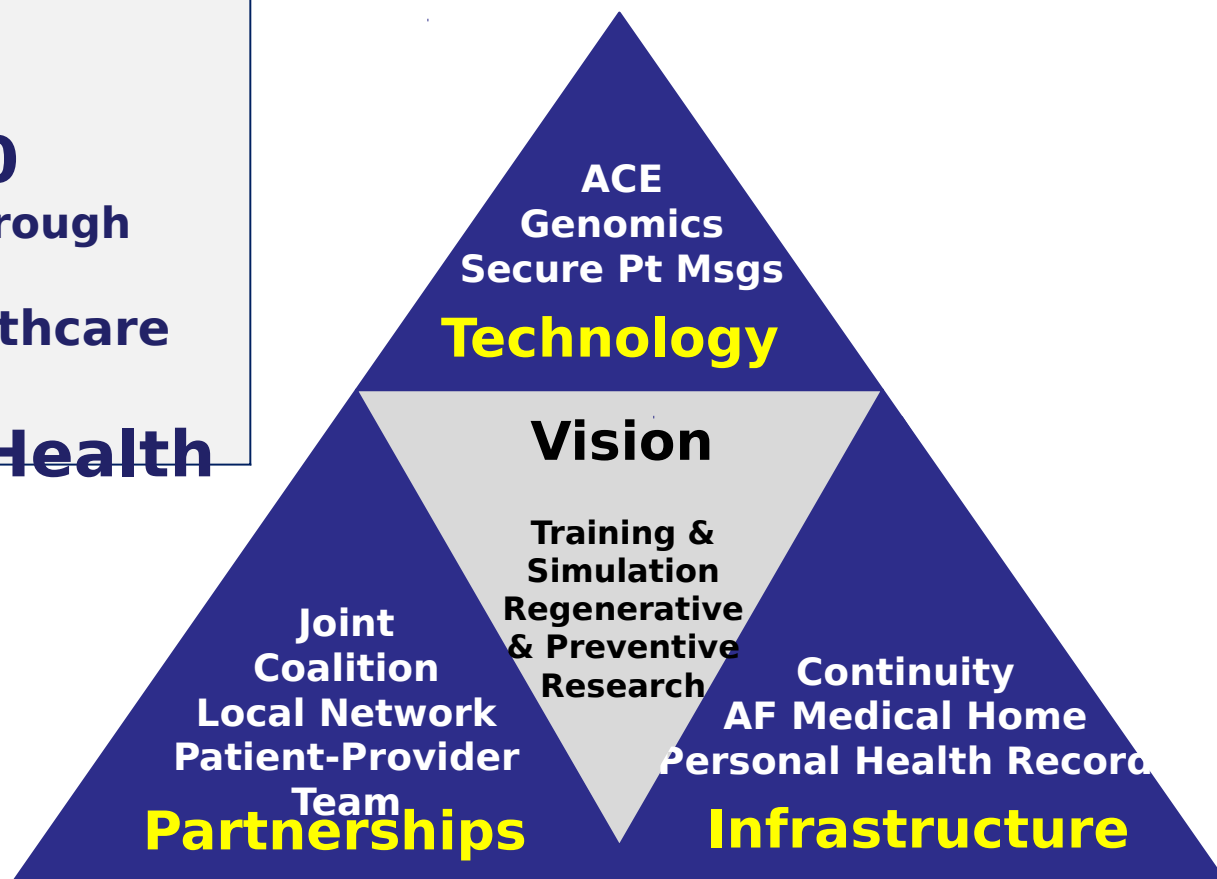


MHS 2010

**Achieving Breakthrough
Performance**

**The Learning Healthcare
System**

Healthcare To Health



We Must Continue To Transition From Healthcare To Health

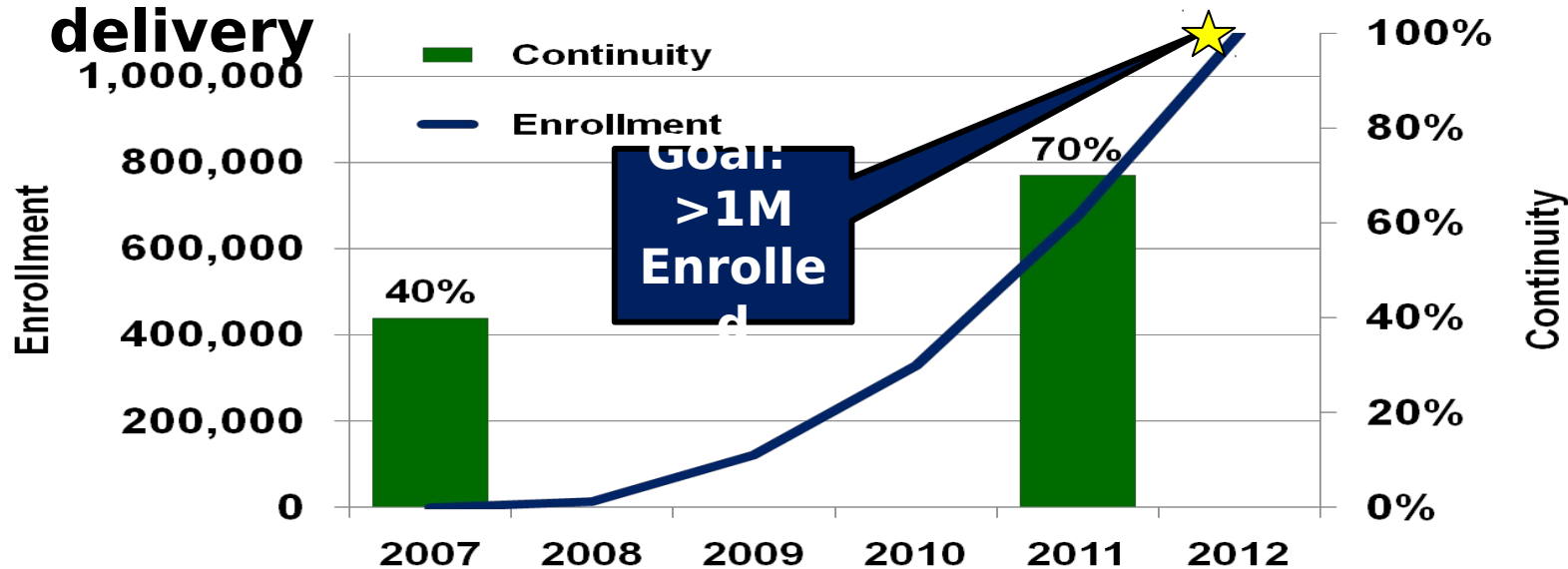


AF Patient Centered Medical Home

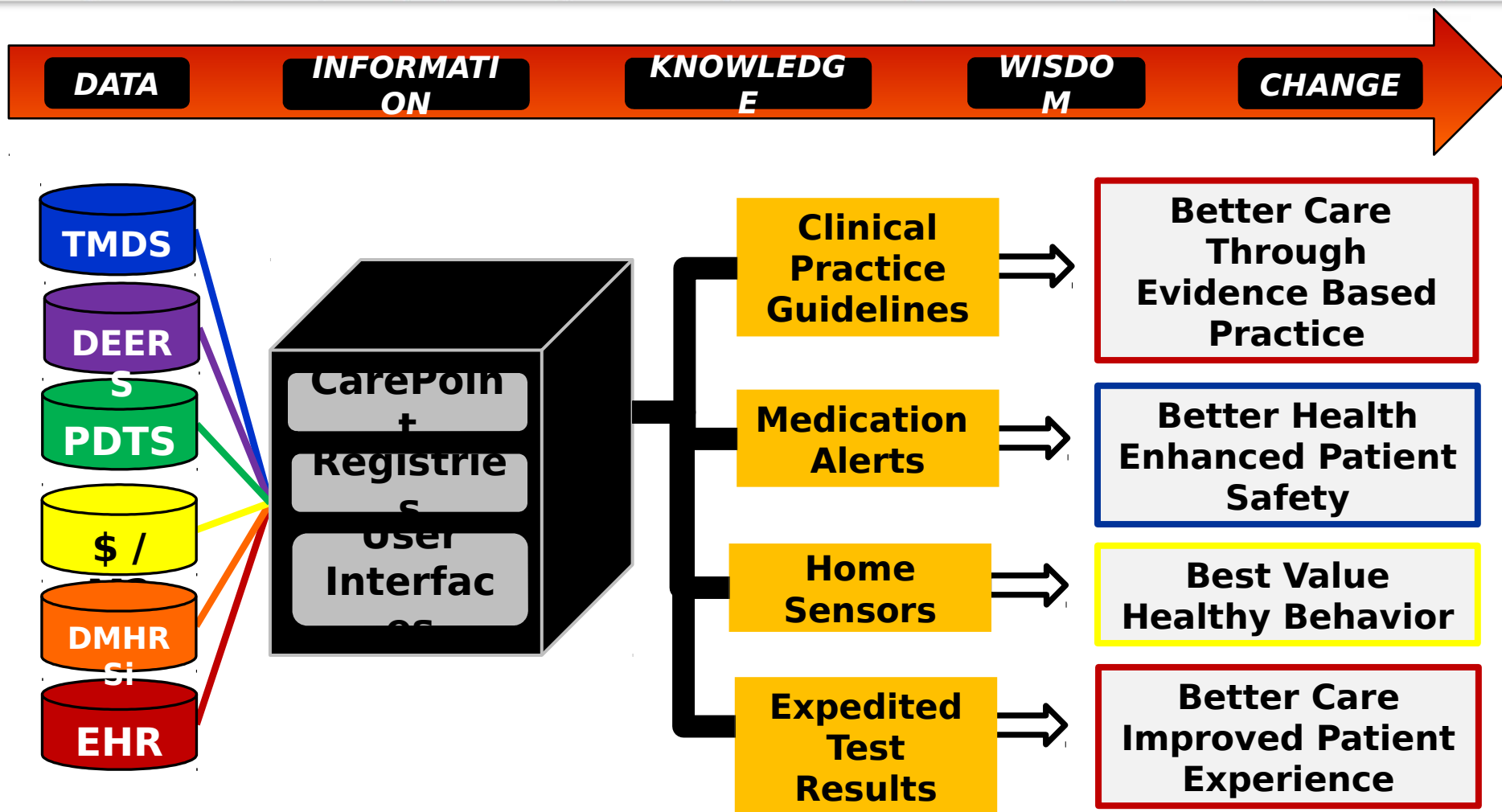


■ PCMH Objectives:

- Continuity = healthier outcomes
- Improve access, quality, service
- Encourage teamwork & communication
- Incentivize healthcare outcomes NOT just delivery



Leveraging Medical Informatics



Decision Support Is No Longer Just For Our Providers

Transforming Data Into Knowledge



Ready

Patients receiving massive infusions of > 10 pints experienced mortality of 33%

Clinical Practice Guideline develop



Study registry to identify trends

Conclude infusing whole blood reduced mortality to less than 20%

Better Health

Better Care

Diabetic patient educated on "remote monitoring"

MTF calls patient to discuss manageme

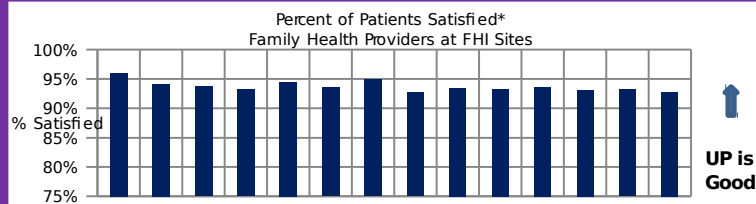
Readings automatically sent to healthcare team

Uncontrolled sugar levels

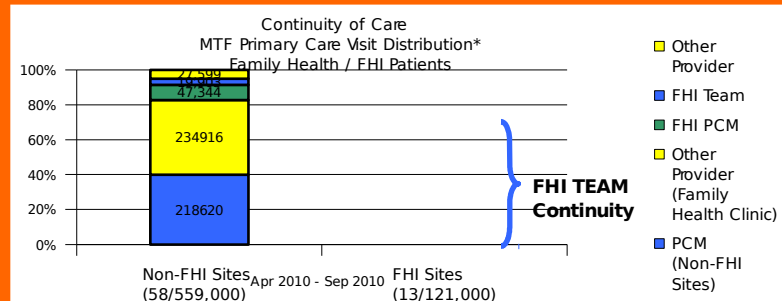


Using Informatics To Accelerate Change In Practice Patterns &

Create The Setting For “Right” Behaviors



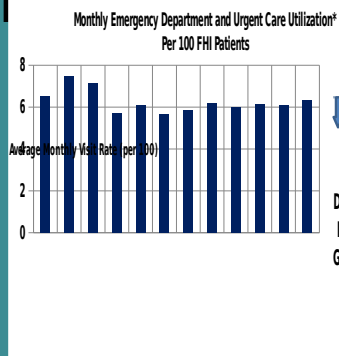
Satisfaction: Goal >95%



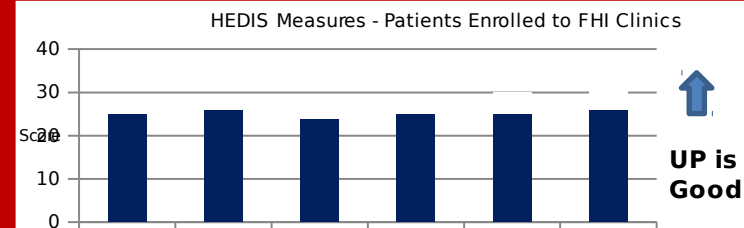
Continuity: Goal > 90%

Plan: Provide both monetary + non-monetary incentives to

High performers



Emergency Rate: Goal < 3/100



HEDIS Aggregate: Goal > 40

Aligning Our Metrics To Inspire Change



Better Care Through Innovation



Now



=

Standard ICU

Adopting Best Practices



Based on model from
Lehigh Valley Health
Network

Advanced ICU

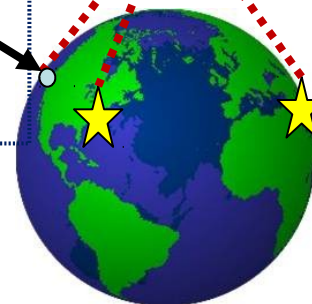
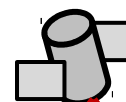
Future

**Advanced ICU
Network
(remote monitoring)**



**Monitor
from
any
location**

Langley (TAFB)



Bagram AB



Maximize Safety And Expertise For Decision



Integrating New Technology



Current CCATT mission



Future CCATT mission -
Wireless



**From Force Health Protection To Logistics To Portable
Surgical Tools**

**Directed
Energy
Sensors**



**Automated
Information
& Data
Collection**



**Hand-held,
Battery-
powered,
Laser Cautery
& Ablation
Tool**



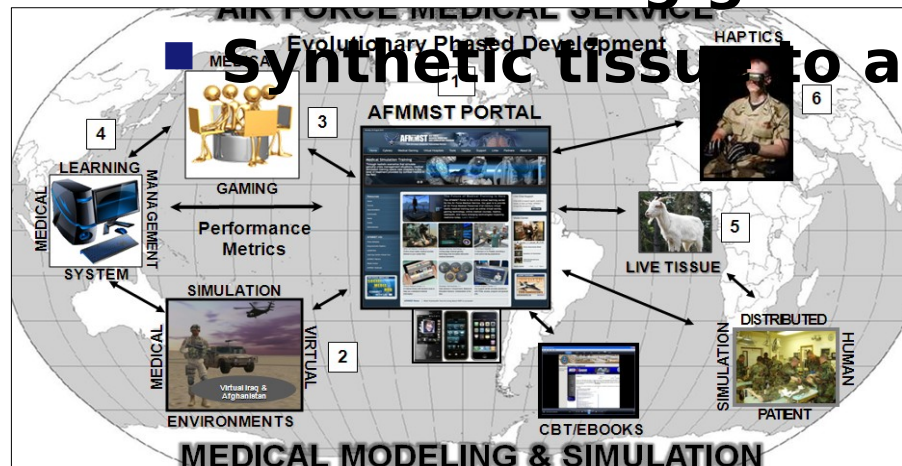
***Improving Our Environment Of Care To Deliver Better
Outcomes***

Generating Skills/Knowledge Through Medical Simulation



- Maximizing the skills of our entire healthcare team
 - Acclaimed for modeling and simulation excellence
 - Initial funding secured & phase 1 development
 - METC training gaming simulations

1st in Dept



Mobile Lightweight Simulator

Realistic Settings Improve Healthcare Team

In Pursuit Of Perfection...



Humanitarian Assistance

Airlift/Deployment Requirements:



< 24 HRS +



Rapid Response Medical Capabilities:



Emergency, Resuscitative, & Surgical Care

**Operational
Lessons
Learned
Earthquakes**

Chile: Jan 2010

Haiti: Feb 2010



**Naval Health
Research Center
(NHRC)**

*Data Modeling
& Forecasting*

**Earthquake
Indonesia
Oct 2009**



**CAN WE
DO BETTER?**

**“Care Upon
Arrival”**

**1st Patient in 1
Hour**

**The Difference Between Life & Death Is Often Measured In
Minutes! Hrs**

Expeditionary Medical System Health Response Team (EMEDS- HRT)



**Concept To
Field Testing
< 12 months**



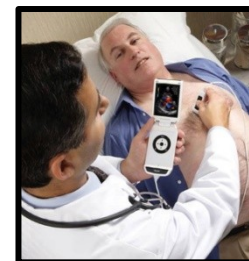
***Emergent care: 30 min
ER : 2 hours OR: 4
hours***

500-12-18 hours

**Innovative
Equipment**



**Lightweight
Roll-on
Roll-off
Storage**



**Mini
Ultrasound
(GE Vscan)**

The Future of Expeditionary Operations...NOW!



Expanding On Innovative Concepts



INTERFLY AGREEMENT

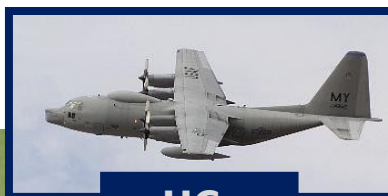


Applying Lessons Learned From The C-17

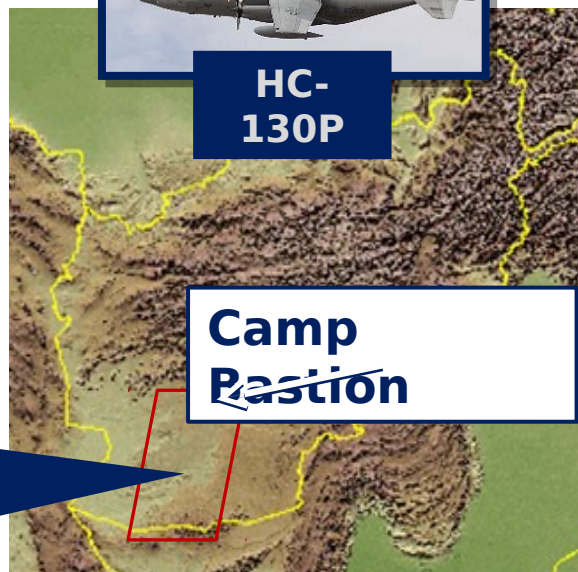
*AeroSpace Interoperability Council



Insurgents shot down
HH-60G Pave Hawk
killing 4
pararescuemen
injuring 3 other



HC-130P



Camp
~~Bastion~~

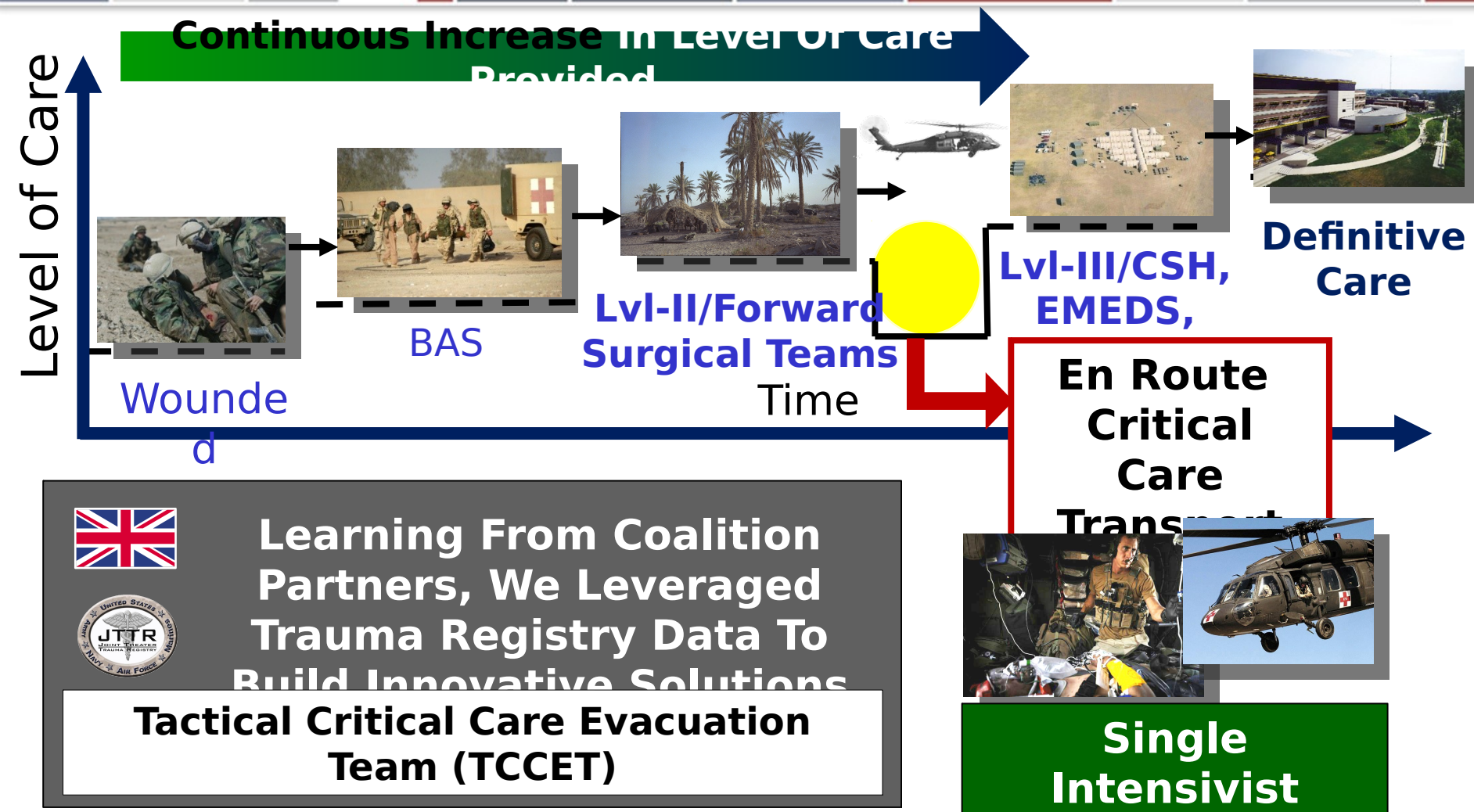


Working Side-by-Side
Casualty #1:
Casualty #2:



Capitalizing On Interoperability, Agility
In Helmund Province
Partnerships!

Intra-Theater Critical Care Transport Gap



Learning From Coalition Partners, We Leveraged Trauma Registry Data To Build Innovative Solutions

Tactical Critical Care Evacuation Team (TCCET)



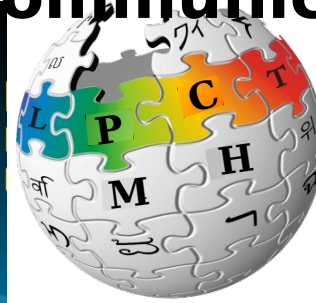
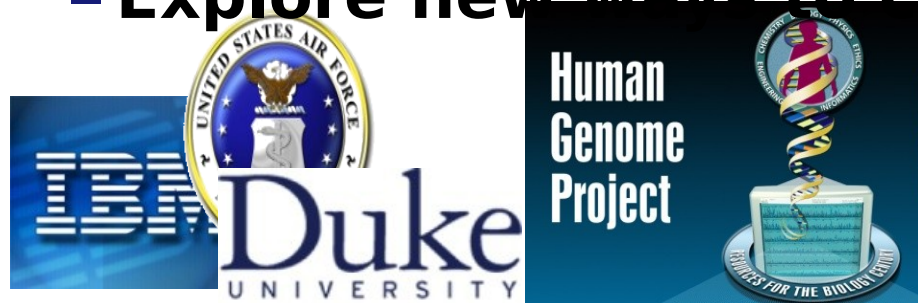
Single Intensivist

Augmenting Our Outstanding Tactical Medical Teams

Synergy Accelerates Transformation



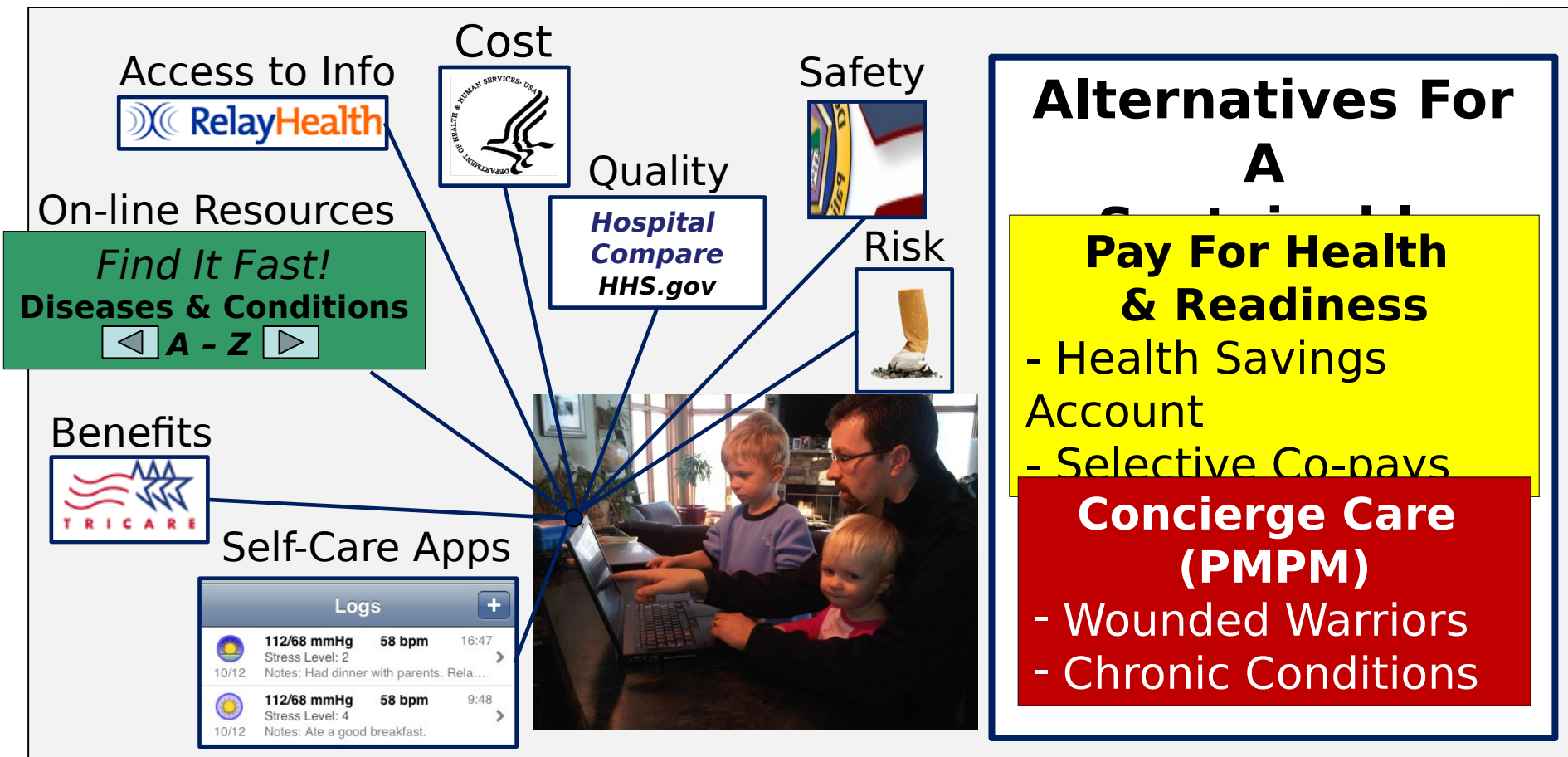
- Leverage civilian expertise through “open” partnerships
- Unleash the power of mass collaboration
- Empower beneficiaries to be informed consumers
- Improve trust through transparency
- Explore new ways to communicate



Generating & Sharing Knowledge Leads To



Consumer Driven Health Begins With Information & Transparency



***Inviting Patients To Be Part Of The Solution...
We Must Drive Informed
Decisions!***

Peacetime Care Underpins Readiness



Cardiothoracic Surgery Suite David Grant Medical Center Travis Air Force Base, CA



**State-of-the-art
operating room
integrates advanced
robotic technology for
complex cardiac and
vascular procedures**

**Constant Pursuit of Innovation Through Generation of
Wisdom**



Putting It All Together...



MHS Quadruple Aim

Ready

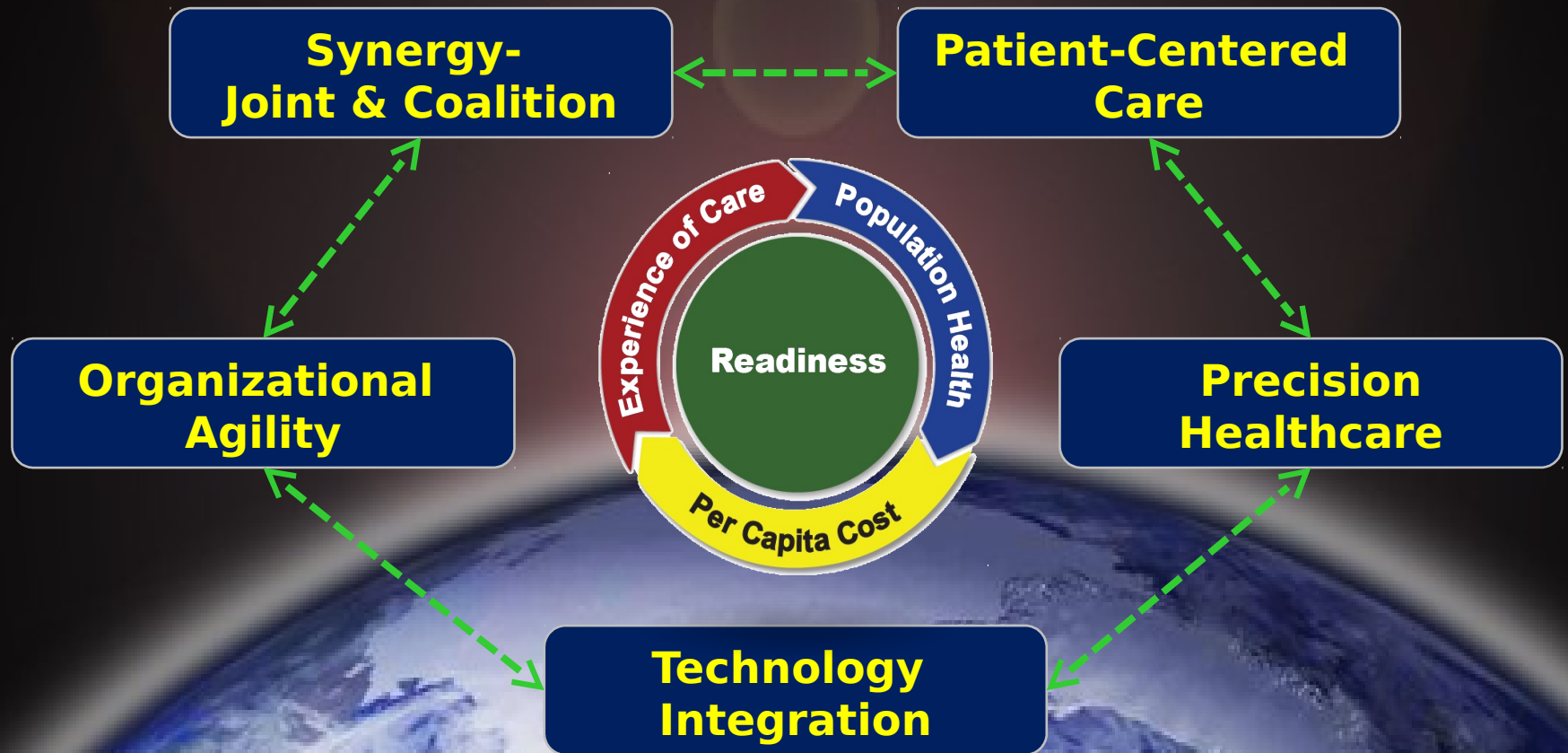
Better Health
"Population Health"

Better Care
"Experience Of Care"

Best Value
"Per Capita Cost"



Shaping the Future of Military Healthcare



***Working Together, Achieving Success Through A
Common Vision***

***“TRUSTED CARE
ANYWHERE”***

